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Total Number of Pages in This Submission

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| Application Number | 09/050,808 |
| Filing Date | March 30, 1998 |
| First Named Inventor | Yutaka Machida |
| Art Unit | 2613 |
| Examiner Name | Allen C. Wong |
| Attorney Docket No. | MAT-5860 |

ENCLOSURES (Check all that apply)

- | | | |
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| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Copy of Notification of Non-Compliant Appeal Brief; Return Receipt Postcard |
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Remarks:

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm Name RatnerPrestia

Signature

Printed Name Lawrence E. Ashery

Date

April 14, 2006

Registration No.

34,515

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April 14, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Office, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

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Application No.: 09/050,808

MAT-5860US

Notification of Non-Compliant Appeal Brief Dated: April 10, 2006



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/050,808
Appellant: Yutaka Machida
Filed: March 30, 1998
Title: DECODING AND CODING METHOD OF MOVING IMAGE
SIGNAL, AND DECODING AND CODING APPARATUS OF
MOVING IMAGE SIGNAL USING THE SAME
TC/A.U.: 2613
Examiner: Allen C. Wong
Confirmation No.: 7277
Docket No.: MAT-5860

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Notification of Non-Compliant Appeal Brief dated April 10, 2006, Appellant is submitting this Response to Notification of Non-Compliant Appeal Brief for the above-identified application.

Respectfully Submitted,

RatnerPrestia

Lawrence E. Ashery, Reg. No. 34,515
Attorney for Appellant

LEA/dmw

Enclosures: Response with
Pending claims and
Evidence Appendix

Dated: April 14, 2006

Application No.: 09/050,808

MAT-5860US

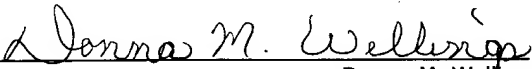
Notification of Non-Compliant Appeal Brief Dated: April 10, 2006

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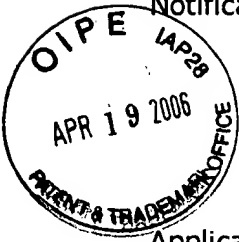

Donna M. Wellings

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Application No.: 09/050,808

MAT-5860US

Notification of Non-Compliant Appeal Brief Dated: April 10, 2006



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/050,808
Appellant: Yutaka Machida
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MOVING IMAGE SIGNAL USING THE SAME
TC/A.U.: 2613
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Docket No.: MAT-5860

SUBSTITUTE APPEAL BRIEF

Mail Stop Appeal Brief - Patents
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I. REAL PARTY IN INTEREST

The real party in interest is Matsushita Electric Industrial Co., Ltd.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

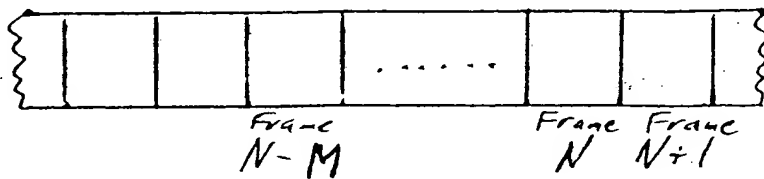
Claims 2, 7 and 12-22 are pending. Claims 1, 3-6 and 8-11 have been cancelled. Claims 2, 7 and 12-22 have been appealed.

IV. STATUS OF AMENDMENTS

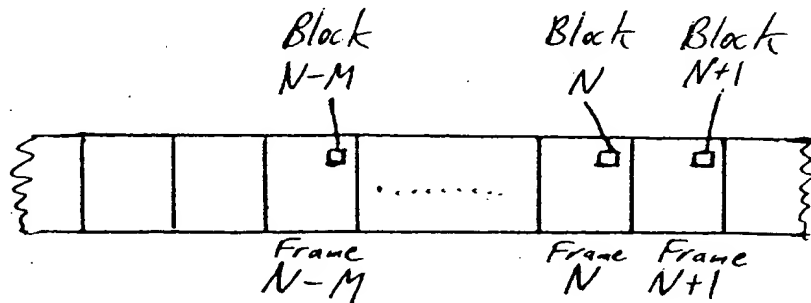
An Amendment after final rejection was filed on February 27, 2004. Appellant's representative argued that this Amendment did not raise new issues. The Examiner disagreed. Accordingly, that Amendment has not been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to a method for decoding a block in a frame. The frame is one of a plurality of successive frames (Appellant's Fig. 2) in a predictively coded image signal. Thus, the plurality of frames may be referred to as frames $N-M$, N , and $N+1$ where M is ≥ 1 . This is illustrated below.



The first step is to evaluate block N of frame N and block $N-M$ of frame $N-M$ (Appellant's specification, page 11, lines 23-26). Block N and block $N-M$ are in corresponding locations. This is illustrated below:



An error is identified in block N or block $N-M$ (Appellant's specification, page 12, lines 13-15).

If the error is identified in block N , then block $N-M$ is used to decode block $N+1$. If the error is found in block $N-M$, then block N is used to decode block $N+1$ (Appellant's specification, page 13, lines 17-21).

An apparatus is also disclosed (and illustrated in Appellant's Fig 1) for performing the method set forth above. Thus, a detector evaluates block N (of frame N) and block $N-M$ (of frame $N-M$). If the detector identifies an error in block

N, then block N-M is used to decode block N+1. If the detector identifies an error in block N-M, then block N is used to decode block N+1.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 2, 7 and 12-22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Parke (U.S. Patent No. 5,982,439) in view of Sun (U. S. Patent No. 5,247,363).

VIII. ARGUMENT

Claims 2, 7 and 12-22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Parke (U.S. Patent No. 5,982,439) in view of Sun (U.S. Patent No. 5,247,363). This rejection is respectfully traversed for the reasons set forth below.

Appellant's invention, as recited by claim 21, includes a feature which is neither disclosed nor suggested by the art of record, namely:

...evaluating block N of frame N and block N-M of frame N-M...

...identifying an error in one of block N and block N-M...

On page three of the Official Action, the Official Action indicates that Appellant's claimed feature of identifying an error is disclosed in Parke at column 13, lines 12-39. Appellant's have reviewed Parke at the aforementioned lines. At the aforementioned lines, there is no mention of "identifying an error" as is claimed by Appellant. Accordingly, claim 21 is patentable over Parke.

Appellant's invention, as recited by claim 21, includes a further feature which is neither disclosed nor suggested by the art of record, namely:

...evaluating block N of frame N and block N-M of frame N-M of said signal, or in blocks N-M, N and N+N are in corresponding locations of frames N-M, N and N+1, respectively...

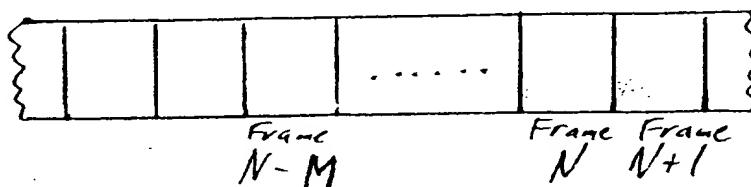
Parke lacks Applicant's claimed "corresponding locations of frames..." At column 13, line 12, Parke discloses the "telescoping concept". At column 13, line 16, Parke is very clear that by calculating a motion vector, this "effectively repositions block 72 to block 76". Thus, block 76 is block 72 after block 72 has been repositioned. This is completely different than Applicant's claimed feature of evaluating "blocks N-M, N and N+N" which "are in corresponding locations of frames N-M, N and N+1, respectively.

Appellant's invention, is recited by claim 21, includes a further feature which is neither disclosed nor suggested by Parke, namely:

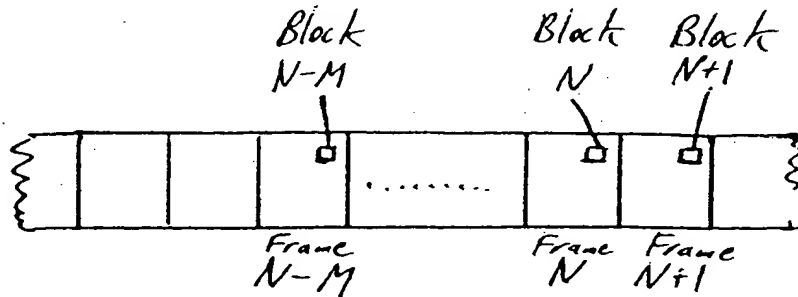
...identifying an error in one of block N and block N-M...

...using the other of block N and block N-M to decode block N+1...

However, Parke says absolutely nothing about identifying an error in one previous frame and then using another previous frame to decode the present block. More specifically, Appellant's claim relates to the following frame sequence:



Each frame has a block in a corresponding location as shown:



Appellant's have claimed the features of:

... identifying an error in one of block N and block N-1...

...using the other of block N and block N-1 to decode block N+1.

Thus, if there is an error in block N, then block N-M is used to decode block N+1. Similarly, if there is an error in block N-M, then block N is used to decode block N+1.

Parke, does not disclose detecting an error in one of frame N-M and frame N and then using the other of frame N-M and frame N to decode frame N+1. Furthermore, Parke does not disclose detecting an error in block N-M or N and then using the other of block N-M or N to decode block N+1. In addition, Parke does not disclose the above with blocks N-M, N and frame N+1 being in corresponding locations in frames N-M, N and N+1. Parke only discloses "telescoping" which is different than Appellant's claimed feature of using one error free frame of two previous frames to correct an error in a current frame. In "telescoping" a block is repositioned into a successive frame. "Telescoping" also relates to a block situated away from a corresponding location in a subsequent (see column 13, line 65, of Parke where an area plus or minus 15 pixel positions is searched). For this additional reason, claim 21 is patentable over the art of record.

On page three, bottom paragraph, the Official Action acknowledged that Appellant's claims are directed to decoding and that Parke has absolutely no disclosure of decoding. More specifically, Parke is directed to encoding. In order to reject Appellant's claims, Parke was combined with Sun which indeed does disclose decoding. Thus, Appellant's claims have been rejected by combining the Parke encoding patent with the Sun decoding patent. This is typically known as a "teaching away" scenario in which two references are combined despite the fact that they teach away from each other. In this case, Parke and Sun are directed to processes that are completely opposite in nature. The references teach away from each other by teaching completely opposite processes. An encoding process is not modifiable by a decoding process disclosure. Conversely, a decoding process is not modifiable by an encoding process disclosure. For this additional reason, claim 21 is patentable over the art of record.

Claim 22, while not identical to claim 21, includes features similar to those set forth above with regard to claim 21. Accordingly, claim 22 is patentable over the art of record.

The remaining claims are all patentable by virtue of their dependency on either allowable independent claim 21 or allowable independent claim 22.

In view of the arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully Submitted,

RatnerPrestia

Lawrence E. Ashery, Reg. No. 34,515
Attorney for Appellant

LEA/dmw

Enclosures: Pending claims
Evidence Appendix

Dated: April 14, 2006

Application No.: 09/050,808

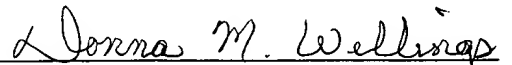
MAT-5860US

Notification of Non-Compliant Appeal Brief Dated: April 10, 2006

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Donna M. Wellings

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APPENDIX OF CLAIMS

1. (Cancelled)
2. (Previously Presented) The method of decoding an image signal of claim 12, wherein if the predicted pixel blocks are free from decoding error,

the predicted pixel blocks produced from a latest decoded frame is used in reconstruction of the present pixel block.
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The decoding apparatus of claim 20, wherein the means for storing stores bit errors of plural video frames by plotting pixel blocks in which bit error is detected in each video frame in a form of decoding error maps.
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Previously Presented) A method of decoding block N+1 according to claim 21, wherein the image signal is a bit stream of a coded compressed video signal, the method further comprising the steps of:

decoding the bit stream for information defining pixel blocks, the information including motion vectors;

step b) includes the step of detecting an error in the information of one of the pixel blocks being blocks N and N-M in each of at least two frames which are prior to a present frame said present frame being frame N+1, said at least two frames being frames N and N-M;

storing error information of the one of the pixel blocks in each of the at least two frames which are prior to the present frame, in an error memory;

storing, in a frame memory, video information of the at least two frames which are prior to a present frame;

generating from the decoded motion vectors at least two predicted pixel blocks corresponding to a present pixel block in the present frame;

step b) further includes the step of judging if one of the at least two predicted pixel blocks corresponds to error information of the at least two frames stored in the error memory; and

step c) includes the step of using one of the at least two predicted pixel blocks in reconstructing the present pixel block based on the judging.

13. (Previously Presented) The method for decoding an image signal of claim 12, wherein each of the predicted pixel blocks is generated from reconstructed video frames by using motion vectors which correspond to the reconstructed video frames.

14. (Previously Presented) The method for decoding an image signal of claim 12, wherein if one of the at least two predicted pixel blocks is judged to correspond to error information stored in the error memory, the other of the at least two predicted pixel blocks is used in reconstruction of the present pixel block.

15. (Previously Presented) The method of decoding an image signal of claim 12, wherein if the at least two predicted pixel blocks are judged not to correspond to error information stored in the error memory, an average of the at least two predicted pixel blocks is used in reconstructing of the present pixel block.

16. (Previously Presented) A method of decoding block N+1 according to claim 21, said method further for reconstructing video frames of the image signal, the method further comprising the steps of:

decoding the image signal for information to define pixel blocks of video frames, the information including motion vectors;

step b) includes the step of generating decoding error maps indicating decoding errors of pixel blocks being blocks N and N-M in each of at least two frames which are prior to a present video frame said present frame being frame N+1, said at least two frames being frames N and N-M;

storing the decoding error maps in error memory;

storing, in a frame memory, video information of the at least two frames which are prior in time to the present video frame;

generating from the decoded motion vectors at least two predicted pixel blocks corresponding to a present pixel block in the present video frame; and

step b) further includes the steps of determining if a predicted pixel block includes decoding errors corresponding to decoding errors in either of the at least two frames which are prior to the present frame; and based on the determining, judging if the predicted pixel block is used in reconstructing the present video block.

17. (Previously Presented) A decoding apparatus according to claim 22, wherein said detector includes

a decoding device for decoding the image signal to define pixel blocks of video frames, the image signal including motion vectors;

means for detecting decoding errors of the pixel blocks being blocks N and N-M in each of at least two frames which are prior to a present video frame said present frame being frame N+1, said at least two frames being frames N and N-M;

an error memory for storing decoding error maps of the decoding errors of the pixel blocks in each of the at least two frames which are prior to the present frame;

motion compensation means for generating from the decoded motion vectors at least two predicted pixel blocks corresponding to a present block which is block N+1 in a present video frame which is frame N+1; and

predicted image selecting means, based on the decoding error maps, determining if the predicted pixel blocks include decoding errors corresponding to decoding errors in either of the at least two frames which are prior to the present

frame, and thereby determining use of the predicted pixel blocks in reconstructing the present block.

18. (Previously Presented) The decoding apparatus of claim 17, wherein the video signal is a bit stream of variable length code, and the decoding device separates and decodes the variable length code from the bit stream and writes presence or absence of decoding errors in the decoding error maps.

19. (Previously Presented) The decoding apparatus of claim 17, wherein the motion compensation means generates one predicted pixel block based on a reconstructed video frame which is one frame before the present frame, and generates another predicted pixel block based on a reconstructed video frame which is two frames before the present frame.

20. (Previously Presented) A decoding apparatus according to claim 22, wherein said detector includes

means for decoding the bit stream for information defining pixel blocks, the information including motion vectors;

means for detecting an error in the information of one of the pixel blocks being blocks N and N-M in each of at least two frames which are prior to a present frame said present frame being frame N+1, said at least two frames being frames N and N-M;

means for storing error information of the one of the pixel blocks in each of the at least two frames which are prior to the present frame;

means for storing video information of the at least two frames which are prior to a present frame;

means for generating from the decoded motion vectors at least two predicted pixel blocks corresponding to a present pixel block which is block N+1 in the present frame;

means for judging if one of the at least two predicted pixel blocks corresponds to error information of the at least two frames stored in the means for storing; and

means for determining if the one of the at least two predicted pixel blocks is used in reconstructing the present block, based on judging of the means for judging.

21. (Previously Presented) A method of decoding block N+1 in frame N+1 of successive frames of a predictively coded image signal, said method comprising the steps of:

- a) evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \geq 1$;
- b) identifying an error in one of block N and block N-M;
- c) using the other of block N and block N-M to decode block N+1.

22. (Previously Presented) Apparatus for decoding block N+1 in frame N+1 of successive frames of a predictively coded image signal, said apparatus comprising:

a detector for evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \geq 1$ and for identifying an error in one of block N and block N-M; and

a decoder for using the other of block N and block N-M to decode block N+1.

Application No.: 09/050,808

MAT-5860US

Notification of Non-Compliant Appeal Brief Dated: April 10, 2006

EVIDENCE APPENDIX

None

MJC



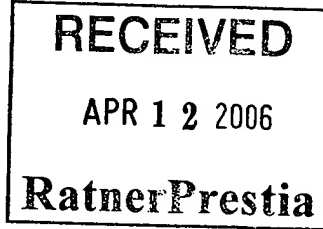
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MAT-F58100US

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| APPLICATION NO. | FILED DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/050,808 | 03/30/1998 | YUTAKA MACHIDA | MAT-5860 | 7277 |

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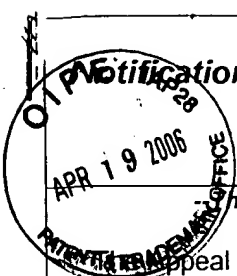
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**Notification of Non-Compliant Appeal Brief
(37 CFR 41.37)**

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| Application No. 09/050,808 | Applicant(s) MACHIDA, YUTAKA | |
| Examiner Allen Wong | Art Unit 2621 | |

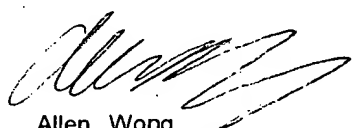
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Appeal Brief filed on 14 February 2005 is defective for failure to comply with one or more provisions of 37 CFR 41.37.

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

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- 1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.
- 2. ☐ The brief does not contain a statement of the status of all claims, (e.g., rejected, allowed, withdrawn, objected to, canceled), or does not identify the appealed claims (37 CFR 41.37(c)(1)(iii)).
- 3. ☐ At least one amendment has been filed subsequent to the final rejection, and the brief does not contain a statement of the status of each such amendment (37 CFR 41.37(c)(1)(iv)).
- 4. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings, if any, by reference characters; and/or (b) the brief fails to: (1) identify, for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function under 35 U.S.C. 112, sixth paragraph, and/or (2) set forth the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification by page and line number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(v)).
- 5. ☐ The brief does not contain a concise statement of each ground of rejection presented for review (37 CFR 41.37(c)(1)(vi)).
- 6. ☐ The brief does not present an argument under a separate heading for each ground of rejection on appeal (37 CFR 41.37(c)(1)(vii)).
- 7. ☐ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(viii)).
- 8. ☒ The brief does not contain copies of the evidence submitted under 37 CFR 1.130, 1.131, or 1.132 or of any other evidence entered by the examiner **and relied upon by appellant in the appeal**, along with a statement setting forth where in the record that evidence was entered by the examiner, as an appendix thereto (37 CFR 41.37(c)(1)(ix)).
- 9. ☐ The brief does not contain copies of the decisions rendered by a court or the Board in the proceeding identified in the Related Appeals and Interferences section of the brief as an appendix thereto (37 CFR 41.37(c)(1)(x)).
- 10. ☐ Other (including any explanation in support of the above items):


Allen Wong
Primary Examiner
Art Unit: 2621